

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/072,479	REIDHEAD ET AL.	
	Examiner Ngoc K. Vu	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 8/8/2006.
2.  The allowed claim(s) is/are 1-28.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

***Allowable Subject Matter***

1. Claims 1-28 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The closest prior art, Williams (US 6,151,559 A) teaches a system for characterizing the impairments affecting a signal path, which may be an upstream or downstream channel in a cable modem, comprising a filter and a totaling counter wherein the counter's total count is increased when an impairment passes through the filter. As shown in figure 1, a bi-directional cable system 100 employs a single mode downstream fiber optic cable 102 for the long reach from a headend 104 to a fiber node 106. In the headend 104, which is the collection point for downstream signals, are located a downstream laser transmitter 108, and an upstream laser receiver 110. Williams fails to teach or suggest the limitations of transmitting a downstream test signal having predetermined characteristics on the cable network in a selected downstream channel at a predetermined power level, receiving/transmitting downstream diagnostic information in a selected upstream channel, the downstream diagnostic information including information a downstream power loss metric, calibrating downstream transmission power based on the downstream power loss metric, comparing the downstream test signal with predetermines characteristics and power level to determine the downstream diagnostic information including a downstream power loss metric and a downstream noise level metric for the selected downstream channel, and comparing the received upstream test signal with the predetermined characteristics and power level to determine corresponding upstream diagnostic information including an upstream power loss metric and an upstream noise level metric in the selected upstream channel as recited in claim 1 and similarly recited in claims 11, 17, and 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the

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issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fong (US 20050198688 A1) teaches a system and method for certifying and monitoring a hybrid fiber coaxial cable plant.

Liang et al. (US 6,445,773 B1) teach a DMT test method for determining ADSL capability of cables.

Ritchie, Jr. et al. (US 5,790,523 A) teach a test system for evaluating the operating state of a headend of a broadband communications network.

Ady et al. (US 20020136165 A1) teach a self table communications device with autonomous diagnostic function.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ngoc K. Vu  
Primary Examiner  
Art Unit 2623

September 5, 2006